

What is claimed is:

1. A multiple-capacitor assembly for an implantable heart monitor, the assembly comprising:
a first capacitor having a first pair of terminals and a first nominal size; and
a second capacitor positioned adjacent the first capacitor and having a second pair of terminals and a second nominal size, with at least one of the second pair of terminals coupled to at least one of the first pair of terminals, and with the second nominal size being different than the first nominal dimension.
2. The multiple-capacitor assembly of claim 1, wherein the first capacitor has a first nominal length and the second capacitor has a second nominal length that differs from the first nominal length.
3. The multiple-capacitor assembly of claim 1, wherein the first capacitor is one of the group consisting of an aluminum electrolytic capacitor, a wet-tantalum capacitor, a dry-film capacitor, and a ceramic capacitor and wherein the second capacitor is a different one of the group.
4. An implantable medical device comprising the multiple-capacitor assembly of claim 1.
5. The multiple-capacitor assembly of claim 1, wherein the first capacitor has a first nominal width and the second capacitor has a first nominal width that is different from the first nominal width.

6. A multiple-capacitor assembly for an implantable heart monitor, the assembly comprising:
a first capacitor having a first pair of terminals, a first case wall, and a first nominal size; and
a second capacitor positioned adjacent the first capacitor and having a second pair of terminals, a second case wall, and a second nominal size, with at least one of the second pair of terminals coupled to at least one of the first pair of terminals, with the second case wall offset from the first case wall, and with the second nominal size the same as the first nominal size.
7. An implantable medical device comprising the multiple-capacitor assembly of claim 6.
8. The multiple-capacitor assembly of claim 6, further comprising:
a third capacitor positioned adjacent the first capacitor and having a third pair of terminals, a third case wall, and a third nominal size, with at least one of the third pair of terminals coupled to at least one of the first or second pair of terminals, with the third case wall substantially flush with the first or second case wall.
9. An implantable medical device comprising the multiple-capacitor assembly of claim 8.
10. The multiple-capacitor assembly of claim 8, wherein the third nominal size differs from the first nominal size.
11. An implantable medical device comprising the multiple-capacitor assembly of claim 10.

12. The multiple-capacitor assembly of claim 6, wherein the first capacitor is one of the group consisting of an aluminum electrolytic capacitor, a wet-tantalum capacitor, a dry-film capacitor, and a ceramic capacitor and wherein the second capacitor is a different one of the group.
13. A capacitor comprising:
a case having a curved interior surface; and
first, second, and third capacitor modules, each having an anode and a cathode and each having respective first, second, and third edge faces that confront the curved interior surface of the case, with the third edge face set back from the second edge face and the second edge face set back from the first edge face to define a profile generally congruent to a profile of the curved interior surface.
14. The capacitor of claim 13, wherein the first and second capacitor modules include respective fourth and fifth edge faces that are not parallel to any of the first, second, and third edge faces, with the fourth edge face set back from the fifth edge face.
15. The capacitor of claim 13, wherein the case has a bottom and the first, second, and third capacitor modules are stacked in ordinal sequence from the bottom, with the first capacitor module closer to the bottom.
16. The flat capacitor of claim 13, wherein the first, second, and third capacitor modules have respective first, second, and third major surfaces having respective curved perimeter portions, with the first, second, and third edge faces corresponding to the curved perimeter portions.
17. An implantable medical device comprising the capacitor of claim 13.

18. The flat capacitor of claim 13, further including a fourth capacitor module having an anode and a cathode and having a fourth edge face that confronts the curved interior surface of the case and that is set back from the third edge face to further define the profile generally congruent to the profile of the curved interior surface.

19. A capacitor comprising:

a case having a curved interior surface; and

first, second, and third capacitor modules, each having an anode and a

cathode, the modules having respective first, second, and third pairs of nonparallel edge faces, with one edge face of each pair confronting the curved interior surface of the case, with the one edge face of the third pair of edge faces set back from the one edge face of the second pair of edge faces and the one edge face of the second pair of edge faces set back from the one edge face of the first pair of edge faces and with the other edge face of the first pair of edge faces set back from the other edge face of the second pair of edge faces.

20. The capacitor of claim 19, wherein the case has a bottom and the first, second, and third capacitor modules are stacked in ordinal sequence from the bottom, with the first capacitor module closer to the bottom than the second and third capacitor modules.

21. An implantable medical device comprising the capacitor of claim 19.

22. A capacitor comprising:

two or more U-shaped aluminum foils; and

at least one U-shaped dielectric layer between two of the aluminum foils.

23. The capacitor of claim 22, wherein the two or more U-shaped aluminum foils includes:
- two or more U-shaped foils that are electrically coupled to each other;
 - and
 - at least one U-shaped foil electrically isolated from the two or more U-shaped foils that are electrically coupled.
24. The capacitor of claim 23, wherein the one U-shaped dielectric layer lies between the two or more U-shaped foils that are electrically coupled to each other and the one U-shaped foil.
25. A capacitor comprising:
- a first generally U-shaped capacitor module including:
 - a first anode having two or more U-shaped conductive layers that are electrically coupled to each other; and
 - a first cathode adjacent the first anode and having at least one U-shaped conductive layer; and
 - a second generally U-shaped capacitor module stacked on the first generally U-shaped capacitor module, the second module including a second anode having two or more U-shaped conductive layer that are electrically coupled to each other and a second cathode having at least one U-shaped conductive layer.
26. An implantable medical device comprising the capacitor of claim 25.
27. The capacitor of claim 25, wherein each conductive layer comprises a metallic foil.

28. The capacitor of claim 25, wherein the first anode comprises a different number of U-shaped conductive layers than the second anode.
29. An implantable medical device comprising the capacitor of claim 28.
30. The capacitor of claim 25, wherein each module includes at least one U-shaped separator between its anode and its cathode.
31. The capacitor of claim 25, wherein the first and second U-shaped capacitor modules include respective first and second pairs of legs and respective first and second middle portions between the respective pairs of legs, with the second middle portion stacked on the first middle portion, and the first and second pairs of legs oriented in a common direction relative the first and second middle portions.
32. The capacitor of claim 31, wherein the first and second middle portions have respective first and second curved edge faces, with the second curved edge face offset from the first curved edge face.
33. An implantable medical device comprising the capacitor of claim 32.
34. The capacitor of claim 29, wherein each of the legs in the first and second pairs of legs has an edge face, with an edge face of one of the second pair of legs offset from the edge face of one of the first pair of legs, with the one of the second pair of legs stacked atop the one of the first pair of legs.
35. An implantable medical device comprising the capacitor of claim 34.

36. A capacitor comprising:
a first foil having a first body region and at least one peninsular region
extending from the first body region;
a second foil having a second body region and at least one peninsular region
extending from the second body region; and
a dielectric layer between the first and second foils.
37. An assembly for implantable medical devices, comprising:
a generally U-shaped capacitor having first and second leg portions and a
middle portion joining the first and second leg portions, with the first
and second leg portions oriented in a common direction relative the
middle portion and spaced apart to define an open region;
a medical-device component positioned within the open region between the
first and second legs.
38. An implantable medical device comprising the assembly of claim 37.
39. The assembly of claim 37, wherein the medical-device component is a battery.
40. An assembly for implantable medical devices, the assembly comprising:
a first generally U-shaped capacitor having first and second leg portions and a
middle portion joining the first and second leg portions, with the first
and second leg portions oriented in a common direction relative the
middle portion and spaced apart to define a first open region;
a second generally U-shaped capacitor placed adjacent the first U-shaped
capacitor, the second U-shaped capacitor having first and second leg
portions and a middle portion joining the first and second leg portions,
with the middle portion of the second capacitor adjacent the middle
portion of the first capacitor and the first and second leg portions of the

second capacitor oriented in the common direction and spaced apart to define a second open region;
a medical-device component positioned at least partly within the first and second open regions.

41. The assembly of claim 40, wherein the medical-device component includes a battery.
42. An implantable medical device comprising the assembly of claim 40.